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IN THE CLAIMS

1. (currently amended) A coil arrangement for a medical imaging system, the coil arrangement comprising:

a plurality of adjacent coil elements for a medical imaging system wherein at least one of the plurality of coil elements is between other ones of the plurality of coil elements and each of the plurality of coil elements is about the same size; and

a plurality of cross-over portions interconnecting each of the plurality of coil elements, and wherein a cross-over portion is provided generally centered between each of the plurality of coil elements.

2. (original) A coil arrangement in accordance with claim 1 wherein the plurality of coil elements comprise at least one saddle coil element.

3. (original) A coil arrangement in accordance with claim 1 wherein the plurality of coil elements comprise at least one each of a saddle coil element and a loop coil element.

4. (previously presented) A coil arrangement in accordance with claim 1 wherein the plurality of coil elements comprise at least one saddle coil element and at least one loop coil element and together with the plurality of cross-over portions forms a saddle train coil array.

5. (original) A coil arrangement in accordance with claim 1 wherein the plurality of coil elements are configured to be combined.

6. (original) A coil arrangement in accordance with claim 1 wherein the plurality of coil elements comprise a plurality of overlapping loop coil elements.

7. (original) A coil arrangement in accordance with claim 1 wherein the plurality of coil elements comprise a plurality of non-overlapping loop coil elements.

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8. (original) A coil arrangement in accordance with claim 1 wherein the medical imaging system comprises a magnetic resonance imaging (MRI) system and the coil elements comprise resonant surface coils.

9. (previously presented) A coil arrangement in accordance with claim 1 wherein the plurality of cross-over portions are each configured in a cross-over arrangement.

10. (original) A coil arrangement in accordance with claim 9 wherein the cross-over arrangement is configured to provide phase encoding information.

11. (original) A coil arrangement in accordance with claim 1 wherein the plurality of coil elements comprise at least one each of a saddle coil element and a loop coil element, and wherein the saddle coil element is positioned generally in about the middle of the coil arrangement.

12. (currently amended) A coil array for a medical imaging system, the coil array comprising:

a first coil array portion having a plurality of coil elements for a medical imaging system;
and

a second coil array portion having a multi-lobe saddle train with at least one lobe between two other lobes, the multi-lobe saddle train comprising a plurality of cross-over portions and wherein a cross-over portion is provided between each adjacent lobe of the multi-lobe saddle train, each of the cross-over portions located a distance from each of an edge of adjacent lobes.

13. (original) A coil array in accordance with claim 12 wherein the first coil array portion comprises a plurality of loop coil elements.

14. (original) A coil array in accordance with claim 12 wherein the multi-lobe saddle train further comprises at least one saddle coil.

15. (original) A coil array in accordance with claim 12 wherein the first and second coil array portions are configured to be combined.

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16. (original) A coil array in accordance with claim 12 wherein the first and second coil array portions together form a coil array configured to be used in combination with other coil arrays.

17. (original) A coil array in accordance with claim 12 wherein the first coil array portion is positioned adjacent the second coil array portion.

18. (original) A coil array in accordance with claim 12 wherein the medical imaging system comprises a magnetic resonance imaging (MRI) system and the coil array portions comprise resonant surface coils.

19. (previously presented) A coil array in accordance with claim 12 wherein the first coil array portion comprises at least one loop coil element and the plurality of cross-over portions are configured having a cross-over arrangement, with the at least one loop coil element generally centered in relation to the cross-over arrangement.

20. (currently amended) A method for providing coil arrays for a medical imaging system, the method comprising:

configuring a coil array to include a plurality of cross-over portions in combination with a plurality of coil elements; and

providing a cross-over portion generally centered between each of three contiguous coil elements of the plurality of coil elements with the three contiguous coil elements being about the same size.

21. (previously presented) A method in accordance with claim 20 further comprising forming a saddle train with the plurality of cross-over portions.